

**St Louis Lead Prevention Coalition**

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**RECEIVED**

JUL 08 2002

**SUPERFUND DIVISION**

A717

Site	Herculaneum
ID #	MO00062/d0373
Break	2.0
Other	
CRW	7-3-02

United States EPA, Region VII  
Bruce Morrison  
901 N 5th Street  
Kansas City KS 66101

July 3, 2002

Dear Mr Morrison,

The St Louis Lead Prevention Coalition is sending you a copy of our letter to the Missouri Department of Natural Resources because of your interest in the lead problem at Herculaneum, Missouri. We are recommending changes and additions to the Interior Dust Clean Up Plan required under the Doe Run Administrative Order on Consent Docket No 07-2002-0038. We hope this letter will bring about the intended actions we suggest, and request your help in obtaining a permanent, safe environment.

Questions regarding this letter should be directed to Judith Riehl, Executive Director at 314-664-9922.

Sincerely yours,



Judith D Riehl  
Executive Director

40172942



**SUPERFUND RECORDS**

*The St Louis Lead Prevention Coalition is a diverse group of individuals and public and private organizations working together to reduce and eliminate lead exposure in the St Louis metro area especially in children.*

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June 25, 2002

Mr David Mosby  
Missouri Department of Natural Resources  
Hazardous Waste Program  
P O Box 176  
Jefferson City, Missouri 65102

Re Transmittal of Comments on the **Interior Dust Clean Up Plan** for Herculaneum

Dear Mr Mosby,

The St Louis Lead Prevention Coalition is a diverse coalition of agencies, organizations, and individuals committed to reducing and eliminating lead poisoning in the greater St Louis metropolitan area, including Jefferson County and the City of Herculaneum, Missouri. This letter presents comments on the Interior Dust Clean Up Plan required under the Doe Run Administrative Order on Consent Docket No 07-2002-0038. These comments are provided with the understanding that 1) the Coalition does not believe any interior cleanup plan can be effective if implemented prior to control of the source of the contamination and 2) the Coalition does not believe any interior cleanup plan can be successfully implemented while the home being remediated is occupied.

**Interior Dust Clean Up Plan, Herculaneum, Missouri**

In general, the Plan contains inadequate and inaccurate information, draws conclusions from incorrectly used references, is not protective of human health and the environment, and as such, is not acceptable.

**1) Section IV A**

**Duct remediation** To clean air ducts in homes, the Plan outlines inserting a vacuum into the vent as far as possible and ignoring all other ductwork. The Plan quotes a USEPA publication entitled 'Should You Have The Air Ducts In Your Home Cleaned?' as justification that remediation of the entire duct system is not necessary. As the reference to the quoted document was incomplete, a USEPA document with the same title was reviewed and is assumed to be the referenced document<sup>1</sup>. The document addresses routine cleaning of home air ducts and does not

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<sup>1</sup> The reference to the quoted document included only the title and the author lacking a date and EPA publication number.

address air ducts contaminated by specific sources. As such, relying on this document as a basis for the recommendation to not clean the entire duct system is unacceptable. The Plan further relies on an assertion provided by the lead abatement training staff at St. Louis University that "there is no solid information linking lead problems to ventilation systems" as reasoning to not clean the entire duct system. Each of these statements is contradicted by data presented in the EPA publication, "Summary and Assessment of Published Information on Determining Lead Exposures and Mitigating Lead Hazards Associated with Dust and Soil in Residential Carpets, Furniture, and Forced Air Ducts," December 1997 (EPA 747-S-97-001). This publication consists of a summary of literature available on lead in dust in carpets, furniture and forced air ducts. This literature review indicates that while there exists limited data regarding lead in air ducts, the data available suggest that one-third of lead in household dust could come from air ducts, and further suggest a significant correlation between floor lead loading and duct loading.

EPA should further investigate the option of remediating the entire ductwork, especially due to the extent of the contamination in these homes and the lack of data regarding the impact of lead contaminated ducts. As the extent of the lead contamination in the city of Herculaneum is unique and as air contamination has been identified as a primary source of lead in homes, the extent of air duct remediation must be distinguished from routine home air duct cleaning or typical lead paint contamination situations.

## **2) Section IV B**

The proposal presented in the Plan to seal attics not regularly accessed by children by caulking them shut is unacceptable. Such sealing will prevent homeowners from using their attics, and will ensure that lead contamination remains within homes. All attics should be remediated because the lead contamination in the attic could pose a health risk in the future for adults or young children. If attics are not cleaned, then lead has the potential to seep into the rest of the home. The April 16, 2002 Health Consultation prepared by the Missouri Department of Health and Senior Services addresses attic contamination and states, "people could potentially be exposed to lead dust through the movement of dust particles from inaccessible and little-used areas in the homes (e.g., attics, wall voids, and cellars) into the living spaces" (MDOHSS Health Consultation, April 16 2002).

The Plan explicitly excludes detached garages from the clean up provisions. As potential exposure sites, the garages should also be remediated.

## **3) Section IV H**

- a) The Plan does not designate when the confirmation sampling must be conducted
- b) The Plan currently calls for sampling in four specific rooms, regardless of the magnitude or location of the lead contamination. This method of confirmation sampling will only yield information on lead levels present in certain areas of the home after remediation, and will not indicate whether the home is safe for residents as these confirmation sampling locations are not representative of the entire home. The Plan fails to take into account that other areas of the homes may have higher levels of lead exposure, including other potential high-use areas by children. For example, the plan is to take a confirmation sample only from the youngest child's room. This is extremely

problematic, for what if the carpet in the 2 year old's room is only one year old, but the carpet in his 4 year old sister's room is 10 years old and therefore likely to be more heavily contaminated (which would be known if pre-cleanup sampling occurred) Pre-cleanup tests must be conducted and confirmation sampling should be designed based on results of pre-remediation testing to ensure that all contaminated areas are addressed At a minimum, confirmation samples should be collected from each room of the house

- c) According to the Plan, confirmation sampling for all surfaces (including carpet) will be conducted according to the methods described in ASTM E 1728-95 However, ASTM E 1728-95, Section 1.3 clearly states that "[t]his practice is not intended for collection of settled dust samples from rough or porous surfaces such as upholstery and carpeting "
  - d) Confirmation sampling is currently described to test lead loading Confirmation samples should be designed to test lead concentrations
  - e) The Plan includes a citation to "40 CFR Part 475 " As this CFR does not exist it was assumed that the intended reference is to "40 CFR Part 745 "
  - f) The Plan states that a carpet will be remediated up to three times if it fails to reach clearance levels The Plan proposes giving HEPA vacuums to residents if the vacuuming fails after three times It is inappropriate to shift the burden to the residents if cleanup contractors cannot effectively do the job If a carpet fails three remediation attempts the carpet should be replaced and the continued source of the lead determined There is absolutely no reason to assume that further vacuuming of the carpet will remediate the contamination to acceptable levels
- 4) **Section IV I** The purpose of the lead survey questionnaire should be clearly stated in the text and on the survey itself The questionnaire seems aimed at identifying other sources of lead besides the smelter and fails to acknowledge the smelter, nothing in the questionnaire addresses proximity to lead smelters or lead mining activities
- 5) **Section V**
- a) The Plan states, "only accredited laboratories experienced in lead analysis will be used for analysis of the clearance samples" However, it does not state the names of the laboratories to be used, their specific accreditation, or how a determination will be made as to whether they are experienced in lead analysis
  - b) The Plan does not include provisions for the collection of QA/QC samples Such samples are referred to in the QAPP, but not in the Plan itself
- 6) **Appendix A** The forms should be approved and signed by homeowners to ensure accuracy
- 7) **Appendix D** Section 1.2 states, 'one to two people will comprise the field/sampling team' The Plan does not specify who employs these people and whether or not they are lead certified

- 8) The Plan does not specify procedures for the remediation contractors to gain access to the homes
- 9) Neither the author(s) of the report nor the report date is provided
- 10) The Plan does not correspond with its table of contents Section VI is mislabeled in the Plan as Section VII, and the Lead Source Survey is labeled Appendix C in the Plan, but listed in the table of contents as Section VII

Thank you for the opportunity to comment on this plan This letter was prepared with the assistance of the Washington University Interdisciplinary Environmental Clinic staff and students, who serve as consultants to the St Louis Lead Prevention Coalition If you have any questions regarding comments please contact Beth Martin, P E , Engineering and Science Director, at 314-935-4136 or feel free to contact me at 314-664-9922

Sincerely,



Judith D Riehl  
Executive Director

Cc Tony Petruska, Project Manager, USEPA Region VII  
Art Spratlin, USEPA Region VII, Director, Air, RCRA, Toxics Division (ARTD)  
Bruce Morrison, USEPA Region VII, Superfund Division, FFSE Branch  
Gene Gunn, USEPA Region VII, Superfund Division, FFSE Branch  
Michael Sanderson, USEPA Region VII, Director, Superfund Division  
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Melissa Manda, General Counsel, MDNR  
Shelley Woods, Missouri Assistant Attorney General  
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